

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 4.4 Revision Date 13.09.2012

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifiers**

Product name : 2-Hydroxyethyl acrylate

Product Number : 292818  
Brand : Aldrich  
Index-No. : 607-072-00-8  
CAS-No. : 818-61-1**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Manufacture of substances

**1.3 Details of the supplier of the safety data sheet**Company : Sigma-Aldrich (Shanghai) Trading Co.,Ltd  
41F K. Wah Centre  
1010 Huai Hai Zhong Road  
200031 SHANGHAI  
CHINATelephone : +86 21-61415566  
Fax : +86 21-61415567  
E-mail address : china@sial.com**1.4 Emergency telephone number**

Emergency Phone # : +8615021113336

**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

Acute toxicity, Dermal (Category 3)

Skin corrosion (Category 1B)

Skin sensitization (Category 1)

Acute aquatic toxicity (Category 1)

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Toxic in contact with skin. Causes burns. May cause sensitization by skin contact. Very toxic to aquatic organisms.

**2.2 Label elements****Labelling according Regulation (EC) No 1272/2008 [CLP]**

Pictogram



Signal word : Danger

Hazard statement(s)

H311

Toxic in contact with skin.

H314

Causes severe skin burns and eye damage.

H317

May cause an allergic skin reaction.

H400

Very toxic to aquatic life.

Precautionary statement(s)

P273

Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER or doctor/ physician.  
 Supplemental Hazard Statements none

**According to European Directive 67/548/EEC as amended.**

Hazard symbol(s)



R-phrases(s)

R24 Toxic in contact with skin.  
 R34 Causes burns.  
 R43 May cause sensitization by skin contact.  
 R50 Very toxic to aquatic organisms.

S-phrases(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S36/39 Wear suitable protective clothing and eye/face protection.  
 S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
 S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

**2.3 Other hazards - none**

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Formula : C<sub>5</sub>H<sub>8</sub>O<sub>3</sub>  
 Molecular Weight : 116,12 g/mol

Component	Concentration
<b>2-Hydroxyethyl acrylate</b>	
CAS-No. 818-61-1	-
EC-No. 212-454-9	
Index-No. 607-072-00-8	

**4. FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

**4.3 Indication of any immediate medical attention and special treatment needed**

no data available

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## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

no data available

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

### 7.3 Specific end uses

no data available

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of

contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection

Material: Chloroprene

Minimum layer thickness: 0,6 mm

Break through time: > 480 min

Material tested: Camapren® (Aldrich Z677493, Size M)

Splash protection

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm

Break through time: > 30 min

Material tested: Camatril® (Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- |   |                                 |
|---|---------------------------------|
| a) Appearance                                   | Form: liquid                    |
| b) Odour  | no data available               |
| c) Odour Threshold                              | no data available               |
| d) pH   | no data available               |
| e) Melting point/freezing point                 | < -60 °C                        |
| f) Initial boiling point and boiling range      | 90 - 92 °C                      |
| g) Flash point                                  | 97 °C                           |
| h) Evaporation rate                             | no data available               |
| i) Flammability (solid, gas)                    | no data available               |
| j) Upper/lower flammability or explosive limits | Lower explosion limit: 1,8 %(V) |
| k) Vapour pressure                              | < 0,13 hPa at 20 °C             |
| l) Vapour density                               | no data available               |
| m) Relative density                             | 1,106 g/cm <sup>3</sup>         |
| n) Water solubility                             | no data available               |

- o) Partition coefficient: n-octanol/water log Pow: -0,21
- p) Autoignition temperature no data available
- q) Decomposition temperature no data available
- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties no data available

## 9.2 Other safety information

no data available

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - rat - 598 mg/kg

#### Skin corrosion/irritation

Skin - rabbit - Severe skin irritation

#### Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation - 24 h

#### Respiratory or skin sensitization

May cause sensitization by skin contact.

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

no data available

#### Specific target organ toxicity - single exposure

no data available

#### Specific target organ toxicity - repeated exposure

no data available

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation**  
**Ingestion**  
**Skin**  
**Eyes**

May be harmful if inhaled. Causes respiratory tract irritation.  
 Harmful if swallowed.  
 May be harmful if absorbed through skin. Causes skin irritation.  
 Causes eye burns.

**Additional Information**

RTECS: Not available

**12. ECOLOGICAL INFORMATION****12.1 Toxicity**

Toxicity to fish - Pimephales promelas (fathead minnow) - 4,8 mg/l - 96,0 h

Toxicity to daphnia and other aquatic invertebrates - Daphnia magna (Water flea) - 0,78 mg/l - 48 h

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

no data available

**12.6 Other adverse effects**

Very toxic to aquatic life.

**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION****14.1 UN number**

ADR/RID: 2922

IMDG: 2922

IATA: 2922

**14.2 UN proper shipping name**

ADR/RID: CORROSIVE LIQUID, TOXIC, N.O.S. (2-Hydroxyethyl acrylate)

IMDG: CORROSIVE LIQUID, TOXIC, N.O.S. (2-Hydroxyethyl acrylate)

IATA: Corrosive liquid, toxic, n.o.s. (2-Hydroxyethyl acrylate)

**14.3 Transport hazard class(es)**

ADR/RID: 8 (6.1)

IMDG: 8 (6.1)

IATA: 8 (6.1)

**14.4 Packaging group**

ADR/RID: II

IMDG: II

IATA: II

**14.5 Environmental hazards**

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

**14.6 Special precautions for user**

no data available

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**15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
no data available**15.2 Chemical Safety Assessment**  
no data available

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**16. OTHER INFORMATION****Further information**

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